Sheet 1 of 5 Application Number 09/823,418 Docket Number 220002059711 Form PTO-1449 Applicant INFORMATION DISCLOSURE CITATION Thomas INNERARITY and Jan BOREN IN AN APPLICATION Group Art Unit 1641 Filing Date March 29, 2001 (Use several sheets if necessary) Mailing Date June 12, 2001 **U.S. PATENT DOCUMENTS** Filing Date If Document No. Name Class Subclass Ref. Date Examiner Appropriate No. **Initials** Mullis et al. 1. 07/28/1987 4,683,195 00 435 2: 07/28/1987 4,683,202 Mullis 91.2 456 3. 08/18/1992 5,139,941 Muzyczka et al. Houghton et al. 4. 09/27/1994 5,350,671 Anderson et al. 5. 03/21/1995 5,399,346 424 6. 12/03/1996 5,580,859 Felgner et al. 514 456 7. 5,656,465 Panicali et al. 435 08/12/1997 5,672,344 Kelley et al. 93.2 8. 09/30/1997 424 9. 12/22/1998 5,851,529 Guber et al. 424 00 168.1 FOREIGN PATENT DOCUMENTS Class Subclass Translation Examiner Ref. Date Document No. Country **Initials** No. YES NO WO 84/03506 10. 09/13/1984 **PCT** M 11. 09/13/1984 WO 84/03564 PCT . **PCT** 12. 02/09/1995 WO 95/04064 13. 12/10/1986 0 200 362 B1 Europe 14. 12/17/1986 0 201 184 B1 Europe 0 229 701 B1 15. 07/22/1987 Europe OA OTHER DOCUMENTS (including author, title, Date, Pertinent Pages, Etc.) Examiner Ref. Title Initials No. Antibodies: A Laboratory Manual. (1988) Harlow, E. and D. Lane, Eds. (Table of Contents). (ho 16. Arnold, K. et al., (1992). "Lipoprotein-Receptor Interactions" in Lipoprotein Analysis. A Practical 17. (No Approach. Converse, C. A. and E. R. Skinner, Eds. Oxford University Press: Oxford. pp. 145-168.

EXAMINER:

DATE CONSIDERED:

13/05

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

PAT JUN 1 8 2001 1

INFORMATION IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 220002059711	Application Number 09/823,418
Applicant	

Thomas INNERARITY and Jan BOREN

Filing Date March 29, 2001 Group Art Unit 1641

Mailing Date June 12, 2001

Oo	18.	Basu, S. et al. (1976). "Degradation of Cationized Low Density Lipoprotein and Regulation of Cholesterol Metabolism in Homozygous Familial Hypercholesterolemia Fibroblasts" Prac Nail: Acad. Sci. USA 73:3178-3182.
)	19.	Borén, J. et al. (1996). "A Simple and Efficient Method for Making Site-Directed Mutants, Deletions, and Fusions of Large DNA Such as P1 and BAC Clones," Genome Res. 6:1123-1130.
	20.	Borén, J. et al. (1998). "Identification of the Low Density Lipoprotein Receptor-Binding Site in Apolipoprotein B100 and the Modulation of its Binding Activity by the Carboxyl Terminus in Familial Defective apo-B100," J. Clin. Invest. 101:1084-1093.
	21.	Camejo, G. et al. (1980). "Factors Modulating the Interaction of LDL with an Arterial Lipoprotein Complexing Proteoglycan: The Effect of HDL," Acta. Med. Scand. Suppl. 642:159-164.
	22.	Camejo, G. et al. (1988). "Identification of Apo B-100 Segments Mediating the Interaction of Low Density Lipoproteins with Arterial Proteoglycans," Arteriosclerosis 8:368-377.
	23.	Camejo, G. et al. (1993). "Binding of Low Density Lipoproteins by Proteoglycans Synthesized by Proliferating and Quiescent Human Arterial Smooth Muscle Cells," J. Biol. Chem. 268:14131-14137.
	24.	Capecchi, M. (1989). "Altering the Genome by Homologous Recombination," Science 244:1288-1292.
	25.	Cardin, A. et al. (1987). "Physical-Chemical Interaction of Heparin and Human Plasma Low-Density Lipoproteins," <i>Biochemistry</i> 26:5513-5518.
	26.	Cardoso, L.E. et al. (1994). "Glycosaminoglycan Fractions from Human Arteries Presenting Diverse Susceptibilities to Atherosclerosis Have Different Binding Affinities to Plasma LDL," Arterioscler. Thromb. 14:115-124.
	27.	Chang, Y. et al. (1983). "Proteoglycans Synthesized by Smooth Muscle Cells Derived from Monkey (Macaca nemestrina) Aorta," J. Biol. Chem. 258:5679-5688.
	28.	Christner, J.E. et al. (1990). "A Competitive Assay of Lipoprotein: Proteoglycan Interaction Using a 96-Well Microtitration Plate," Analytical Biochem. 184:388-394.
	29.	Corsini, A. et al. (1987). "Receptor Binding Activity of Lipid Recombinants of Apolipoprotein B-100 Thrombolytic Fragments" J. Lipid Res. 28:1410-1423.
	30.	Costa, G. et al. (1994). "Polishing with T4 or Pfu Polymerase Increases the Efficiency of Cloning of PCR Fragments," Nucleic Acids Res. 22:2423
	31.	Deng, W. et al. (1992). "Site-Directed Mutagenesis of Virtually Any Plasmid by Eliminating a Unique Site," Anal. Biochem. 200:81-88.
	52.	Edwards, I. et al. (1993). "Lipoprotein Lipase Enhances the Interaction of Low Density Lipoproteins with Artery-Derived Extracellular Matrix Proteoglycans," J. Lipid Res. 34:1155-1163.
00	33.	Eisenberg, S. et al. (1992). "Lipoprotein Lipase Enhances Binding of Lipoproteins to Heparan Sulfate on Cell Surfaces and Extracellular Matrix," J. Clin. Invest. 90:2013-2021.

EXAMINER:		124	~
-----------	--	-----	---

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

•	PATE JUN	٠. ا	•	PTO/SB/08 (2-92) Sheet 3 of 5
Form PTO (249)		2001 E	Docket Number 220002059711	Application Number 09/823,418
INFORMATION OF CLOSURE CITATION IN AN APPLICATION			Applicant Thomas (NNERARITY and Jan BOREN	
		lse several sheets if necessary)	Filing Date March 29, 2001	Group Art Unit 1641
			Mailing Date June 12, 2001	
00	34.	Gaffney, D. et al. (1995). "Independent Associated with Hyperlipidemia," Ar		
35. Galis, Z. et al. (1993). "Co-Localizati Injury Model of Atherosclerosis," Am				d Chondroitin Sulfate in an
	36.	Geysen, H.M. et al. (1984). "Use of Resolution of a Single Amino Acid,"		
	37.	Goldstein, J. et al. (1985). "Receptor Receptor System," Annu. Rev. Cell B		
38. Hirose, N. et al. (1987). "Isolation and Characterization of Four Heparin-Binding Cyanogen Bromide Peptides of Human Plasma Apolipoprotein B," Biochemistry 26:5505-5512.			y 26:5505-5512.	
39. Hobbs, H. et al. (1992). "Molecular Genetics of the LDL Receptor Gene in Familial Hypercholesterolemia," Hum. Mutat. 1:445-466.			ene in Familial \circ	
	40.			
	41. Hoff, H. et al. (1983). "Apolipoprotein B Localization in Coronary Atherosclerotic Plaques from Cynomolgus Monkeys," Artery 12:104-116.			Atherosclerotic Plaques from
	42. Hu, G. (1993). "DNA Polymerase-Catalyzed Addition of Nontemplated Extra Nucleotides to the 3'End of a DNA Fragment," DNA and Cell Biology 12:763-770.			ted Extra Nucleotides to the
	43.	Hurt, E. et al. (1987). "Effect of Arte Monocyte-Derived Macrophages," A		ction of LDL with Human
	44. Hurt, E. et al. (1990). "Interaction of LDL with Human Arterial Proteoglycans Stimulates its Uptak by Human Monocyte-Derived Macrophages," J. Lipid Res. 31:443-454.			
45. Hurt-Camejo, E. et al. (1997). "Cellular Consequences of the Association of apoB Lipoproteins w Proteoglycans," Arterioscler Thromb Vasc Biol. 17:1011-1017.		ation of apoB Lipoproteins with		
	46. Innerarity, T. et al. (1987). "Familial Defective Apolipoprotein B-100: Low Density Lipoproteins with Abnormal Receptor Binding," <i>Proc. Natl. Acad. Sci. USA</i> 84:6919-6923.			019–6923.
Innerarity, T. et al. (1990). "Familial Defective Apolipoprotein B-100: A Mutation of Apolipoprotein B that Causes Hypercholestrolemia," J. Lipid Res. 31:1337-1349.				
	48. Ismail, N. et al. (1994). "Lipoprotein-Proteoglycan Complexes from Injured Rabbit Aortas Accelerate Lipoprotein Uptake by Arterial Smooth Muscle Cells," Atherosclerosis 105:79-87.			
	49.	Johnstone, A. et al. (1996). "Purification of Immunoglobulins," <u>Immunochemistry in Practice</u> . Blackwell Scientific Publications; Oxford. p. 69.		
\	50.	Knott, T. et al (1985). "Human Apol Gene Expression, and Chromosomal	Localization," Science. 230:37-	43.
On	51.	Knott, T. et al. (1986). "Complete Pr Human Apolipoprotein B," Nature 3		on of Structural Domains of
EXAMI	NER:	/ hatel	DATE CONSIDERED:	

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

		A 3011 1 8 2001 A		Sheet 4 of 5
Form PTC)-1449	Ta Lucia	Docket Number 220002059711	Application Number 0 /82 ,418
Form PTO-1449 INFORMATION DISCLOSOR ATTION			Applicant	
IN AN APPLICATION			Thomas INNERAR	
	(Us	se several sheets if necessary)	Filing Date March 29, 2001	Group Art Unit 1641
•			Mailing Date June 12, 2001	O LUIN
				genesis Without Phenotypic
00	52.	Kunkel, Thomas A. (1985). "Rapid a Selection," Proc. Natl. Acad. Sci. U.S.		genesis Without Phenotypic
	53.	Lindén, T. et al. (1989). "Affinity of of Myocardial Infarction," Eur. J. Cl.	LDL to a Human Arterial Protect	oglycan Among Male Survivors
	54.	Linton, M. et al. (1993). "Transgenic		Concentrations of Human
	54.	Apolipoprotein B100 and Lipoprotein	(a)" J. Clin. Invest. 92:3029-30)37.
	55.	Mahley, R. et al. (1977). "Inhibition	of Lipoprotein Binding to Cell S	urface Receptors of Fibroblasts
		Following Selective Modification of A	Arginyl Residues in Arginine-Ric	ch and B Apoproteins," J. Biol
		Chem 252:7279-7287.	SDI Time Aria Caralina	in a Analisa instaina D and E
	56.	Mahley, R. et al. (1979). "Interaction with Heparin and Cell Surface Receptor		
	57.	McCormick, S. et al. (1994). "Expres		
	37.	Genet. Anal. Tech. Appl. 11:158-164.		
	58.	Merrilees, M.J. et al. (1990). "Glycos	saminoglycan Synthesis by Smo	oth Muscle Cells of Differing
		Phenotype and their Response to Endo	thelial Cell Conditioned Medius	m," Atherosclerosis 81:245-
		254.	- 1 C - 1N V1 Ed-	Andreis Press (Table of
	59.	Methods in Enzymology (1979). Col	owick, S. and N. Kapian, Eds. A	Academic Press. (1 able of
	(0	Contents). Milne, R. et al. (1983). "Characteriza	tion of Monoclonal Antibodies	Against Human Low Density
	60.	Lipoprotein," Arteriosclerosis 3:23-3		riguille, 11umum 2011 20110119
	61.	Molecular Cloning: A Laboratory Man	nual. (1989). Second Edition. J	. Sambrook et al., Eds. Cold
		Spring Harbor Laboratory Press: Cold	Spring Harbor. (Table of Conte	ents).
	62.	Mullis, K.B. et al. (1987). "Specific S		Polymerase-Catalyzed Chain
	(0)	Reaction" Methods in Enzymology 15 Nelson, M. et al. (1992). "Use of DN		ase Engine Combinations for
	63.	Megabase Mapping of Chromosomes'		
	64.	Nievelstein-Post, P. et al. (1994). "An		
	υ 1 .	Valves of the Rabbit" Arterioscler. Th	hromb. 14:1151-1161.	•
65. Nucleic Acid Hybridisation. A Practical Approach. (1985). Hames, B.D. & S. J. Hig		B.D. & S. J. Higgins, Eds. IRL		
Press. (Table of Contents). 66. Oligonucleotide Synthesis. A Practical A		l Approach. (1984). Gait, M.J.	Ed., IRL Press. (Table of	
	00.	Contents).		
	67.	Olsson, U. et al. (1994). "Possible Fu		
		Associate with Cell Proteoglycans and	the ApoB/E Receptor," (1997)	Arterioscler. Throm. Vasc.
		Biol. 17:149-155.	. 15 . CI . D	i
\	68.	Paananen, K. et al. (1994). "Proteoly Independently Strengthen their Bindin		
		269:2023-2031.	g to Exocytosed Mast Cell Ofall	uies, J. Divi. Chem.
	69.	PCR Technology. (1989). Erlich, H.A.	A. Ed. Stockton Press. (Table o	f Contents).
ON	70.	Pentikäinen, M.O. et al. (1997). "The Collagen Type I," J. Biol. Chem. 272:		ow Density Lipoproteins with
EXAMI	NER:	Morr	DATE CONSIDERED:	
EXAMIN	ER: Initia	al il citation considered, whether or not the citati	on conforms with MPEP 609. Draw a	line through the citation if not in
conformance and not considered. Include a copy of this form with next communication to applicant.				



INFORMATION DISCLOSUREMENTATION
IN AN APPLICATION
(Use several sheets if necessary)

Docket Number 220002059711

Applicant

Thomas INNERARITY and Jan BOREN

Filing Date March 29, 2001

Group Art Unit 1641

		Mailing Date June 12, 2001		
		Ш 5		
00	71.	Protein Purification: Principles and Practice. 2nd Edition. Scopes, R.K., Ed. (1987) Springer Verlag. (Table of Contents).		
	72.	Pullinger, C. et al. (1995). "Familial Ligand-Defective Apolipoprotein B" J. Clin. Invest. 95:1225-1234.		
1	73.	Radhakrishnamurthy, B. et al. (1990). "Arterial Wall Proteoglycans - Biological Properties Related to Pathogenesis of Atherosclerosis," Eur. Heart J. 11(Suppl E):148-157.		
	74.	Ross, R. (1995). "Cell Biology of Atherosclerosis," Annu. Rev. Physiol. 57:791-804.		
	75.	Saiki, R. et al. (1988). "Primer-Directed Enzymatic Amplification of DNA with a Thermostable DNA Polymerase," Science 239:487-491.		
	76.	Schönherr, E. et al. (1993). "Platelet-Derived Growth Factor and Transforming Growth Factor-\beta 1 Differentially Affect the Synthesis of Biglycan and Decorin by Monkey Arterial Smooth Muscle Cells," Arterioscler. Thromb. 13:1026-1036.		
	77.	Schönherr, E. et al., (1991). "Effects of Platelet-Derived Growth Factor and Transforming Growth Factor-β1 on the Synthesis of a Large Versican-Like Chondroitin Sulfate Proteoglycan by Arterial Smooth Muscle Cells," J. Biol. Chem. 266:17640-17647.		
	78.	Steele, R. et al. (1987). "Artery Wall Derived Proteoglycan-Plasma Lipoprotein Interaction: Lipoprotein Binding Properties of Extracted Proteoglycans," Atherosclerosis 65:51-62.		
	79.	van Barlingen, H.H. et al. (1996). "Lipoprotein Lipase-Enhanced Binding of Human Triglyceride-Rich Lipoproteins to Heparan Sulfate: Modulation by Apolipoprotein E and Apolipoprotein C," Journal of Lipid Res. 37:754-763.		
	80.	Vandeyar, M.A. et al., (1988). "A Simple and Rapid Method for the Selection of Oligodeoxynucleotide-Directed Mutants," Gene 65:129-133.		
	81.	Walton, K. et al. (1968). "Histological and Immunofluorescent Studies on the Evolution of the Human Atheromatous Plaque," J. Atheroscler. Res. 8:599-624.		
	82.	Weiner, M. et al. (1994). "Site-Directed Mutagenesis of Double-Stranded DNA by the Polymerase Chain Reaction," Gene 151:119-123.		
	83.	Weisgraber, K. et al. (1978). "Role of the Lysine Residues of Plasma Lipoproteins in High Affinity Binding to Cell Surface Receptors on Human Fibroblasts," J. Biol. Chem. 253:9053-9062.		
	84.	Weisgraber, K. et al. (1986). "Human Apolipoprotein E: Determination of the Heparin Binding Sites of Apolipoprotein E3," J. Biol. Chem. 261:2068-2076.		
	85.	Weisgraber, K. et al. (1987). "Human Apolipoprotein B-100 Heparin-Binding Sites," J. Biol. Chem. 262:11097-11103.		
	86.	Williams, K.J. et al. (1995). "The Response-to-Retention Hypothesis of Early Atherogenesis," Arterioscier. Thromb. Vasc Biol. 15:551-561.		
Oro	87.	Yao, Z. et al. (1992). "Elimination of Apolipoprotein B48 Formation in Rat Hepatoma Cell Lines Transfected with Mutant Human Apolipoprotein B cDNA Constructs," J. Biol Chem. 267:1175-1182.		

EXAMINER:	mogn.	DATE CONSIDERED:

EXAMINER: Initial of citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.